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Report of the World Bank on the International Comparison Programme

Note by the Secretary-General

In accordance with Economic and Social Council decision 2018/227 and past practices, the Secretary-General has the honour to transmit the report of the World Bank on the International Comparison Programme (ICP), which is being submitted to the Statistical Commission for discussion. The report outlines the activities undertaken in 2018 at the global, regional and national levels to implement the 2017 comparison cycle and transform ICP into a permanent programme. The report describes the governance, capacity-building, research, knowledge and advocacy activities carried out in this regard. The Commission is invited to take note of the progress made in implementing the 2017 cycle and the outstanding risks; urge national, regional and global agencies to complete the 2017 cycle activities without further delays; advise ICP stakeholders to initiate preparations for the 2020 cycle; and impress upon national, regional and global agencies the need to incorporate ICP into their regular statistical work programmes so as to ensure its sustainability as a permanent programme.

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I. Executive summary

1. The International Comparison Programme (ICP) celebrated its fiftieth anniversary in 2018. Over five decades, ICP has grown from a small research project to the largest permanent statistical programme in the world, with nearly 200 economies and multilateral agencies participating.

2. The most recent purchasing power parity/parities (PPP/s) published by the Programme are benchmarked to reference year 2011 and new data were collected over the three-year span from 2016 to 2018, with a mid-cycle reference year of 2017. The results from this 2017 cycle are due to be published by the end of 2019. An exercise is also under way to estimate a PPP time series that bridges between the reference years 2011 and 2017. A new three-year ICP cycle for reference year 2020 will be launched in 2019.

3. A total of 175 countries are participating in the ICP 2017 cycle. By October 2018, 165 countries had submitted preliminary household consumption price data to the World Bank Global ICP Unit. Data quality assessment is under way at the national, regional and global levels. Delays in initiating ICP 2017 activities in some regions and countries permit less time to conduct data validation activities than in previous ICP rounds. However, the first assessment of the 2017 cycle input data revealed more robust data at this early stage than in previous rounds. In addition, innovative validation approaches that leverage data visualization were developed to increase the efficiency of ICP quality assurance processes.

4. The Governing Board, Inter-Agency Coordination Group and Technical Advisory Group constitute the ICP governance bodies. They convened, and reported as planned, throughout 2018. The sharing of expertise among the ICP community continues to grow, with the number of capacity-building workshops and technical assistance missions expanding in all regions. The ICP research agenda led by the Technical Advisory Group is gaining momentum, with three task forces conducting research on 6 out of 13 identified specific topics. On resource mobilization, additional funding was secured in 2018 from the Arab Fund for Economic and Social Development to support Arab countries.

5. The revamped ICP website was designed to answer the majority of questions a visitor to the site may have, while the eLearning course on the fundamentals of PPPs, launched in March 2018, takes practitioners through all aspects of PPP methodology. By October 2018, around 290 people had enrolled in the course. A new ICP blog series within the World Bank's data blog platform was launched in September 2018, which invites ICP producers and users from across the globe to share ideas on innovations in data collection, compilation, curation and dissemination, and catalyses discussions on methodology and how to widen the applications of PPPs.

6. Outreach by the Global ICP Unit resulted in greater visibility for the Programme. Events marking the Programme's fiftieth anniversary in New York, Washington, D.C., and Beijing raised awareness of ICP across the international development community and beyond. The quarterly ICP Highlights newsletter has a readership spanning academia, international and regional institutions, national Governments, research bodies and other PPP users and producers.

7. The use of PPPs continues to expand. The World Bank Group now incorporates PPPs into its dynamic formula [1] for computing the shareholding rights of the International Bank for Reconstruction and Development member countries. Monitoring of progress towards the 2030 Agenda for Sustainable Development

[1] World Bank and International Monetary Fund, "Dynamic formula: report to Governor's annual meetings 2016", 20 September 2016.

continues apace and PPPs feature in the official indicators for 5 of the 17 goals and their targets, as well as many other associated indicators. In particular, analysis of Goals 1 and 10, and the World Bank's twin goals of reducing poverty and boosting shared prosperity, benefited from new poverty estimates released in September 2018 by the World Bank, which use international poverty lines defined by PPPs. Numerous analyses by research bodies, the development community, academia and the media rely on PPPs for their cross-country comparisons.

8. Despite all this progress, some risks to the ICP 2017 cycle persist and need to be addressed. By October 2018, 10 countries were late in submitting household consumption price data and about 100 countries were still conducting their surveys and compilations for housing, government compensation and gross capital formation. Efforts to ensure data quality and assess comparability over time continue to require more validation and technical assistance at all levels. Any further delay in activities would put the planned release of the 2017 results by the end of 2019 at risk.

9. Looking beyond the ICP 2017 cycle, preparations for the ICP 2020 cycle will be initiated in 2019. This includes ensuring that both the necessary funding and administrative arrangements are in place to allow data collection to begin without delay.

10. In conclusion, ICP continues to build upon its vital role of producing PPPs and related indicators, allowing meaningful comparisons to take place across economies. However, for it to thrive over the long term, ongoing advocacy to policymakers and mainstreaming ICP activities into regular statistical programmes at the national, regional and global levels are critical.

II. Introduction

11. In 2018, ICP celebrated its golden jubilee with a series of events and reflections across the globe. The Programme was initiated 50 years ago as a modest research project between the United Nations and the University of Pennsylvania, with financial contributions from the Ford Foundation and the World Bank; its aim was to set up a regular programme of PPP-based comparisons of gross domestic product (GDP). Since 1968, ICP has evolved into the largest statistical partnership in the world, with an increasing number of participating countries. At its forty-seventh session, in March 2016, the Statistical Commission instituted ICP as a permanent element of the global statistical programme, to be conducted on a three-year cycle.

12. The ICP 2017 cycle was initiated successfully at the national, regional and global levels with data collection taking place from 2016 to 2018. Additionally, some regions undertook interim comparisons between the 2011 round and the 2017 cycle. The results for the reference year 2017 are due to be published by the end of 2019. In addition, global PPP time series bridging benchmark results for 2011 and 2017, incorporating interim regional results where possible, will be produced. However, delays in initiating survey activities in some regions and countries have posed risks to the timeliness, coverage and quality of the expected results. Thus, ICP stakeholders have increased their efforts to mitigate these risks and ensure a successful 2017 cycle that will place the permanent ICP programme on a strong footing.

13. The present report provides a comprehensive update on the activities undertaken from October 2017 to October 2018. It is organized into seven sections as follows: governance and coordination; programme implementation; research and innovations; knowledge and advocacy; uses of PPPs; financial status; and risks and mitigation measures.

III. Governance and coordination

A. Statistical Commission

14. The Statistical Commission is the ultimate stakeholder of ICP, deciding the frequency and operational modality of the Programme.

15. At its forty-ninth session, held in New York from 6 to 9 March 2018, the Statistical Commission took note of the progress report of the World Bank, in which the ICP activities undertaken at the global, regional and national levels to complete interim comparisons, launch the implementation of the 2017 cycle and transform ICP into a permanent element of the global statistical work programme were outlined. Countries commented on the report, indicating their commitment to ICP, the usefulness of the Programme and the importance of integrating ICP surveys into national statistical work programmes.

B. Governing Board

16. The Governing Board sets the policies that govern the production of regional and global PPPs, approves the Programme's methodology and any methodological improvements, advocates to policymakers to ensure the ongoing inclusion of ICP in national statistical work programmes and helps with ICP fundraising.

17. The third meeting of the Governing Board[2] took place on 25 October 2018 in the United Arab Emirates. The Board reviewed and discussed the global and regional progress of the 2017 cycle of the Programme, outstanding risks and related mitigation measures and preparations for the ICP 2020 cycle. The fourth meeting of the Board is scheduled for March 2019 in New York.

C. Technical Advisory Group

18. The Technical Advisory Group assures the methodological soundness and overall quality of the PPP estimates, ensures transparency of the PPP estimation process and supports the establishment of a permanent ICP with greater frequency.

19. The second meeting of the Technical Advisory Group[3] took place on 23 May 2018, in Washington, D.C. The Group discussed the progress of the 2017 ICP cycle and the ICP research agenda and reviewed the progress made by the various ICP task forces[4] that tackle specific topics on the research agenda.

20. The Group discussed selected proposals, including an approach for interpolating between benchmark years, new data sources for productivity adjustment for labour and improving housing quality indicators. The Group noted that there may be a need to recalculate the ICP 2011 results, since the Eurostat-Organization for Economic Cooperation and Development (OECD) programme revised their PPP time series and several countries revised, in some cases significantly, their GDP expenditures since the publication of the ICP 2011 results. The third meeting of the Group is scheduled for May 2019 in France.

[2] See www.worldbank.org/en/programs/icp/brief/gb-meetings.
[3] See www.worldbank.org/en/programs/icp/brief/tag-meetings.
[4] See www.worldbank.org/en/programs/icp/brief/taskforces.

D. Inter-Agency Coordination Group

21. The Inter-Agency Coordination Group is the coordinating body that collaborates on establishing timetables and workplans, develops common standards, methods and protocols and agrees upon operational aspects of the Programme.

22. A meeting of the Coordination Group principals[5] took place on 4 March 2018 in New York, in conjunction with the forty-ninth session of the Statistical Commission. At the meeting, updates on global and regional ICP activities and related risk assessment were provided.

23. The fifth meeting of the Coordination Group[6] was held on 14 and 15 March 2018, in Washington, D.C. Attendees discussed global and regional activities and risks, the status of data submissions, feedback on operational materials, regional support needs on gross capital formation surveys, the overall timeline, the publication of results and data access, an update on data processing tools, and outreach, knowledge and PPP use.

24. The sixth meeting of the Coordination Group was held on 24–26 September 2018 in Washington, D.C. Participants discussed global and regional activities and risks and the status of data submissions. A detailed quality assessment of 2017 and interim data was conducted. Finally, the overall timeline, plans for publication and data access were discussed. The seventh meeting of the Coordination Group is scheduled for April 2019 in Washington, D.C.

IV. Programme implementation

A. Overall timetable

25. The timetable for the main surveys for the 2017 cycle, which include collection of prices for household goods and services, varied across regions. Household consumption price surveys began in the first quarter of 2016 and continued until the fourth quarter of 2018. Other data collection and compilation activities, including housing, government compensation and gross capital formation, took place from the second quarter of 2017 to the fourth quarter of 2018. National accounts expenditure data compilation started in the first quarter of 2017 and will continue until the third quarter of 2019. Global results for 2017 are due to be published by the end of 2019. In addition, global PPP time series bridging benchmark results for 2011 and 2017, incorporating interim regional results where possible, will be produced. Additionally, given the large revisions in GDP expenditures for some countries after the publication of the ICP 2011 results, the need to revise 2011 results was raised by the Technical Assistance Group and discussed by the Coordination Group and relevant ICP task forces. The plan is to complete the calculation of revised 2011 results by the third quarter of 2019. The overall ICP 2017 cycle timetable is available on the ICP website.[7]

B. Status of regional programmes and capacity-building activities

26. In September 2018, regional implementing agencies, as well as Eurostat and OECD, reported on the progress on the ICP 2017 cycle, on interim exercises, where applicable, and on the compilation of data for PPP time series. The reports covered

[5] International Comparison Program, "Minutes of the Inter-agency Coordination Group principals meeting", 4 March 2018.

[6] See www.worldbank.org/en/programs/icp/brief/iacg-meetings.

[7] See www.worldbank.org/en/programs/icp.

country participation, the schedule of price surveys and national accounts activities, capacity-building workshops and technical assistance missions, quality assessment efforts, and the calculation of final results, as well as efforts to increase ICP advocacy and awareness in their respective regions.

Africa

27. The African Development Bank (AfDB) reported that 50 countries were participating in the 2017 cycle; Egypt, Morocco and the Sudan are participating in both the Africa and Western Asia regional comparisons. Some additional countries, such as Libya and South Sudan, as well as Somaliland, are benefiting from capacity-building activities, but are not taking part in the 2017 regional comparison.

28. The household consumption price surveys for the 2017 cycle for all 50 countries were completed by the end of November 2018. By October 2018, data from 40 countries had been submitted to the Global ICP Unit. Efforts were under way to receive data from the remaining 10 countries, namely Angola, Burkina Faso, Cape Verde, Equatorial Guinea, Gabon, Ghana, Guinea, Liberia, Madagascar and Nigeria. Other data collection on non-household items and data validation were ongoing at various stages across the region; technical assistance was offered to the countries that were lagging. On national accounts, GDP expenditure aggregates for most countries were expected by the end of 2018 and the subsequent work of providing detailed expenditures, compiling and reviewing the related metadata and finalizing the expenditure data will be completed by July 2019.

29. Preliminary results will be calculated during May to July 2019 and reviewed by the regional experts group and AfDB will strive to release the final results in summary form in December 2019. The main tables of results will be published in electronic form in January 2020 and the final report will be published in July 2020.

30. The region also conducted an interim exercise, whereby household consumption price data were collected by 47 countries from August 2015 until July 2016; 34 of those countries limited their geographical coverage to their capital cities. A meeting of the regional experts group was convened by AfDB in April 2018 in Côte d'Ivoire. The group reviewed the resulting preliminary data and recommended that further data validation and editing take place before a timetable for the publication of the interim comparison results is confirmed.

31. In addition to the meeting of the regional experts group, three additional activities were organized. A regional workshop took place in April 2018 in Togo, a workshop on gross capital formation took place in June 2018 in Côte d'Ivoire and an ICP subregional workshop took place in July 2018 in Kenya.

32. In terms of outreach and awareness raising, an ICP advocacy note was presented to the thirteenth African Symposium on Statistical Development, held 1–4 October 2018 in Ethiopia. In addition, the objectives, methods and uses of ICP form a component of most statistical training and capacity-building activities throughout the region. Countries have also been encouraged to promote ICP alongside their national accounts data releases.

Asia and the Pacific

33. The Asian Development Bank (ADB) reported that 22 countries were taking part in the 2017 cycle. The household consumption data collection began in the period April to August 2017 and covered a 12-month cycle for each country. Thus, the prices collected in 2018 were retropolated to the reference year 2017. Data collections for gross capital formation were conducted during the last quarter of 2017 and the first quarter of 2018. Housing rental surveys were collected in 2018, while data for housing

volume and government compensation were collected in the second half of 2018, with 2017 as the reference year.

34. In addition, 20 countries participated in the interim update exercise for 2016. Preliminary price and GDP data, as well as elementary PPPs, were submitted to the Global ICP Unit in August 2018 for global validation purposes.

35. Regional training and data validation workshops were held on a quarterly basis during 2017 and 2018, mainly in Thailand. Country training was provided by ADB on demand to China and Myanmar in 2017 and ADB distributed guidelines for countries covering key concepts of ICP and PPPs, as well as guidelines for household consumption survey operations. Additionally, specific technical and operational guidelines for non-household surveys and GDP were distributed. A regional workshop conducted in October 2018 reviewed concepts and practices on national accounts and government compensation and validated housing rental data, and a workshop to review price and detailed national accounts expenditure data for 2017 took place in December 2018.

36. Price data from both the interim update exercise and the 2017 cycle are expected to be finalized in the second quarter of 2019 and national accounts expenditure data for both the interim update exercise and 2017 cycle will be finalized in the third quarter of 2019, with the release of results tentatively in line with the global timetable of December 2019.

37. In terms of outreach and advocacy, ADB continues to encourage countries to harmonize their consumer price index (CPI) activities with those of ICP and to institutionalize the Programme in their national statistical plans.

Commonwealth of Independent States

38. The Interstate Statistical Committee of the Commonwealth of Independent States (CIS-STAT) reported that eight countries of the Commonwealth of Independent States (CIS) participated in the interim 2014 comparison. The final results were released in April 2017 and the statistical abstract[8] presenting detailed results was published in June 2017.

39. The same eight countries joined the 2017 cycle. The Russian Federation is participating in both the CIS and OECD comparisons. Moreover, discussions with Turkmenistan and Uzbekistan are under way but their participation is not yet officially confirmed.

40. Data collection for the 2017 cycle on both household consumption and gross capital formation took place in 2017. Guidelines on investment items were sent to national statistical offices in June 2017 and the data reviewed in December 2017. A regional expert meeting took place in May 2018 and reviewed price data and preliminary PPP estimates for household consumption. Technical assistance to Tajikistan took place in June 2018.

41. Guidelines on housing rents, housing volume and government compensation were distributed in March 2018 and data collection was carried out in late 2018. Guidance on the disaggregation of GDP by expenditures was also circulated and the data will be the focus of a regional workshop in April 2019. Additionally, the region held a meeting in December 2018 to discuss 2008 System of National Accounts (SNA) issues related to the 2017 cycle. The detailed national accounts expenditure data for 2017 will be finalized by the third quarter of 2019.

[8] Interstate Statistical Committee of the Commonwealth of Independent States, *2014 International Comparison of CIS Countries' GDP Based on Purchasing Power Parities* (Moscow, 2017).

42. Summary results are expected to be released in the last quarter of 2019, while detailed results will be published in the second quarter of 2020.

43. Efforts are being made by CIS-STAT to increase knowledge and use of ICP and PPPs. A paper[9] on the Programme appeared in a key journal on statistics and research and the International Association for Research in Income and Wealth special conference to be held in September 2019 in Moscow will host a session on PPPs, catalysing a dialogue between producers and users.

Latin America and the Caribbean

44. The Economic Commission for Latin America and the Caribbean (ECLAC) reported in September 2018 that, while 37 countries were officially participating in the region's 2017 cycle, data had been received from 35 countries, including the recent additions of Argentina and Honduras. The pending cases are Sint Maarten and Guatemala and ECLAC was discussing with these countries the possible submission of their data before the end of 2018. Neither Cuba nor Venezuela (Bolivarian Republic of) are participating and Colombia and Costa Rica, which were part of the Latin America and the Caribbean comparison in 2011, are now covered by the OECD programme.

45. Guidance and price lists were circulated between June 2017 and July 2018. Data collection on household consumption items started in the first quarter of 2018, with some delay in many countries. Data collection for non-household items took place between July and October 2018. The region trialed data collection for housing rents via web scraping and will compare the preliminary results with traditional collection methods. Detailed estimates of national accounts expenditure data for 2017 will be finalized in the first quarter of 2019 and the calculation of preliminary regional results will be completed by the second quarter of 2019, at which time it will be shared with the Global ICP Unit.

46. An ICP technical meeting took place in May 2018 in Panama, at which price statisticians reviewed initial household survey prices and were introduced to the non-household survey forms. In addition, at sessions with national accountants ICP national accounts requirements were discussed. Country missions took place in both Guyana and Montserrat in July and August 2018. A workshop in October 2018 in Trinidad provided help on GDP expenditure methodology to Caribbean countries. A technical meeting to review household and non-household survey prices took place in Bogota in December 2018.

47. The final regional results and findings are expected to be published in the last quarter of 2019 in line with the global schedule. While no new data collections have taken place in the interim period, ECLAC is using existing national data provided by the countries on GDP, CPIs, exchange rates and population to estimate an interim time series bridging the 2011 and 2017 results.

48. In terms of outreach, ECLAC has presented plans for the implementation of a rolling survey approach for future ICP cycles at a number of high-level meetings and is anticipating showcasing the results of its web-scraping pilot.

Western Asia

49. The Economic and Social Commission for Western Asia (ESCWA) reported that 12 countries in Western Asia were participating in an interim regional comparison.

[9] Andrey Kosarev and Sergey Sergeev, "Linking ICP regions with double participation using the 'partially-multilateral' approach (2014 CIS ISP experience)", paper prepared for the thirty-fifth general conference of the International Association for Research in Income and Wealth, Copenhagen, August 2018. Available at www.iariw.org/copenhagen/kosarev.pdf.

Increased national capacities have provided the region with an opportunity to refine its entire PPP time series and report more accurate, high quality indicators. Improved collection, validation and reviewing mechanisms, together with the availability of more recent household budget data for expenditure estimates, contributed to this. The regional results are currently being finalized for the years 2014–2016 and are expected to be published in the fourth quarter of 2018, alongside revised data for the years 2011 to 2013.

50. A total of 12 countries are participating in the 2017 cycle in the Western Asia region. Egypt, Morocco and the Sudan are participating in both the Africa and Western Asia regional comparisons. Libya is not joining the 2017 cycle because of impeding geopolitical situations, but an anticipated statistical capacity-building exercise is planned to be held in 2019. The data collection process is complete and progress is being made in the activities for the 2017 cycle on the basis of the established timetable. Detailed estimates for national accounts expenditure data for 2017 will be available in the fourth quarter of 2018. Final regional results are expected to be published in December 2019.

51. A total of three regional workshops were held between December 2017 and April 2018 in Turkey: a workshop to validate national accounts expenditure data for 2014–2016 was held in December 2017; a workshop to finalize 2014–2016 price data was held in February 2018; and a workshop to review preliminary results for 2014–2016 was held in April 2018. Additionally, an ICP session within a workshop on the assessment of price statistics and harmonization of price indices took place in September 2018 in Egypt. The Global ICP Unit also hosted a workshop to train trainers on PPP computation for the ESCWA team in June 2018 in Washington, D.C. Two national training workshops for the United Arab Emirates were held in December 2017 and January 2018. Regional workshops for the validation of 2017 price and national accounts expenditure data took place in December 2018.

52. Some countries in Western Asia have integrated the ICP tasks within their regular work programmes, such as pricing ICP items within their national CPI process. As a result, they are seeing the benefits of more frequent annual data collection. The ICP non-household surveys have catalysed some countries to develop their own specific indices such as a construction price index. Building greater awareness of ICP and PPPs in the region has been energized through regional newsletters and a new website, as well as initiatives to integrate ICP activities with other price statistics. National agencies have also been making efforts to promote ICP and PPPs.

Eurostat-Organization for Economic Cooperation and Development

53. Eurostat and OECD execute a regular programme to produce annual PPP estimates according to a well-established timetable. A total of 49 countries are participating in the Eurostat-OECD PPP programme in the 2017 cycle; 37 are coordinated by Eurostat, while 12 countries are coordinated by OECD, including Colombia and Costa Rica, which have moved from the Latin America and the Caribbean comparison. The Russian Federation is participating in both the CIS and OECD comparisons. The regional results for the Eurostat-OECD programme will be available in the last quarter of 2019.

54. Two regional workshops were held in May 2018 in France. The OECD meeting discussed the annual calculation of PPPs, progress of the 2017–2018 PPP surveys and the specific requirements of the ICP 2017 cycle. Participants at the Eurostat-OECD workshop discussed national practices for calculating national annual average prices, spatial adjustment factors, integrating PPP and CPI activities, new data sources and PPPs, and PPP calculation methods, among other topics.

Special participation cases

55. Georgia and Ukraine are participating in the ICP 2017 cycle and will be linked to the global comparison through the Eurostat comparison. National workshops for these two countries were held in April and October 2018 to validate their data and calculate their preliminary results.

56. In addition, the Islamic Republic of Iran will be linked to the global comparison through the Western Asia comparison. In this regard, a workshop was conducted in October 2018 in Turkey to discuss participation by the Islamic Republic of Iran in the 2017 cycle and to validate its data.

C. New operational materials

57. As part of its efforts to provide technical assistance to regions and countries in improving data quality, the Global ICP Unit developed a new set of operational guidelines and materials for validating national accounts expenditures and housing data. For the former, intracountry and intercountry validation tools were updated from the 2011 version to accommodate the new ICP classification and to include more enhanced validations. For the latter, the Unit developed a housing volume data validation tool as well as a comprehensive validation tool, which uses housing rental, volume and expenditure data for a more comprehensive analysis. The four tools were discussed at the Inter-Agency Coordination Group and housing task force meetings in September 2018 and are currently being used in regional validation workshops.

V. Research and innovations

A. Research agenda

58. At its forty-seventh session, in 2016, the Statistical Commission recommended that no methodological changes be introduced for the ICP 2017 cycle so as to maintain comparability over time and allow for producing reliable PPP time series. However, to fine tune the methodology and guide the future of ICP, it was agreed to set a research agenda focusing on: (a) building consistent PPP time series; (b) improving PPP reliability and quality; (c) addressing difficult-to-measure areas, such as housing and government services; (d) strengthening alignment between PPPs and national statistical programmes; (e) advocating wider uses and applications of PPPs; and (f) exploring innovations in technology and new sources.

59. Thus, an ICP research agenda was put forth by the Inter-Agency Coordination Group in September 2016, approved by the Technical Advisory Group in May 2017 and endorsed by the Governing Board in September 2017. The ICP research agenda covers the following 13 items identified by the Advisory Group: (a) compilation of PPP time series and the rolling survey approach; (b) PPPs and real expenditures for dwelling services; (c) productivity adjustment for government and construction labour; (d) fine-tuning global linking procedures; (e) quality and reliability of PPPs; (f) uses of PPPs for national and international policymaking; (g) CPI-ICP synergies and subnational PPPs; (h) PPPs for exports and imports; (i) PPPs for construction; (j) PPPs for health and education; (k) PPPs and global poverty measurement; (l) exploring innovations in technology and data sources for PPP measurement; and (m) accounting for product quality differences in PPP measurement.

60. By October 2018, research had been initiated for the agenda items covering the

global linking procedures, CPI-ICP synergies and subnational PPPs and, to a limited extent, PPP uses, and PPPs and poverty measurement.

B. Task forces

61. The Technical Advisory Group has established task forces to undertake research into the above-mentioned technical items on the ICP research agenda and support the computation of ICP results. The following three task forces were established in 2017: (a) PPP compilation and computation; (b) housing; and (c) country operational guidelines and procedures. The meetings of the task forces have largely been organized in conjunction with the Inter-Agency Coordination Group meetings to maximize the benefit of the presence of regional implementing agencies to tackle operational aspects.

62. The first meeting of the task force on PPP compilation and computation[10] was held in October 2017 in Washington, D.C. The main objective of the meeting was to initiate discussions on: (a) building PPP time series for the interim period; (b) linking interim regional updates into a global comparison; (c) fine-tuning global linking procedures; and (d) providing productivity adjustment factors for government and construction labour. The second meeting was held in March 2018 in Washington, D.C., to review the progress to date on the ICP research agenda topics assigned to the task force. The task force convened for a third meeting in September 2018, again in Washington, D.C., and discussed: (a) a proposal for producing interpolated PPP time series for the years between reference year comparisons; (b) the need for recalculating the ICP 2011 results; and (c) new data sources for estimating productivity adjustment factors.

63. Moreover, a task team[11] on data quality assurance for the PPP time series was formed with the International Monetary Fund (IMF), the Statistics Division of the Department of Economic and Social Affairs of the Secretariat and the World Bank as members. The task team held its first meeting on 13 June 2018 and its second meeting in conjunction with the Inter-Agency Coordination Group meeting on 26 September 2018, both in Washington, D.C. Attendees reviewed the availability and quality of input data and metadata needed for building interpolated PPP time series for the period 2011–2017, including GDP expenditures, CPIs, deflators, population, exchange rates and SNA metadata.

64. The first meeting of the task force on housing[12] was held in October 2017 in Washington, D.C. At the meeting, discussions were initiated on PPPs and real expenditures for dwelling services. The second meeting was held in March 2018 in Washington, D.C., to discuss the agreed-upon tasks from the first meeting and discuss plans for the task force's final deliverables. A housing metadata questionnaire was finalized with inputs from the task force and distributed to regions in April 2018. The task force convened for a third meeting in September 2018, again in Washington, D.C., and discussed progress on: (a) housing data collection and validation steps; (b) updated research on housing quality indicators; (c) linking regions for housing volumes; and (d) fine-tuning dwelling type definitions.

65. The first meeting of the task force on country operational guidelines and procedures[13] was held in October 2017 in Washington, D.C. Participants discussed the topics assigned to the task force, including moving towards rolling price surveys,

[10] See www.worldbank.org/en/programs/icp/brief/tf01.

[11] See www.worldbank.org/en/programs/icp/brief/tf01.

CPI-ICP synergies to improve spatial and temporal price consistency, and subnational PPPs. A second meeting was held in March 2018 in Washington, D.C., to present and discuss the agreed-upon tasks from the first meeting and to lay out the initial groundwork for the task force's final deliverables. The task force convened for a third meeting in September 2018, again in Washington, D.C., and discussed contributed notes and case studies on: (a) rolling price surveys and ICP; (b) subnational PPPs; and (c) CPI-ICP synergies, and agreed on the content and structure of the forthcoming country guidelines documents on subnational PPPs and CPI-ICP synergies.

66. The demand for subnational PPPs is increasing; projects are under way in various countries, including India, the Philippines, South Africa, the United Arab Emirates and Viet Nam. The compilation of subnational PPPs provides national policymakers with an important tool for comparison within different regions of the country, as well as rich insights that allow for informed and impactful policy decisions. Subnational PPPs are often used for adjusting the national poverty line along with comparing cost of living differences across regions within a country. These data can also be used for setting minimum wages or salaries and the measurement of income inequality across regions of the country.

67. A side meeting on the World Bank global poverty monitoring programme and PPPs was organized by the Global ICP Unit in May 2018 in Washington, D.C., in conjunction with the second meeting of the Technical Advisory Group. At this side meeting, discussions were initiated on the ICP research agenda item on PPPs and poverty measurement and the World Bank's global poverty monitoring programme, and how these two work programmes can interact. This meeting can be considered a preparatory meeting for the task force that would tackle the research agenda item on PPPs and global poverty measurement.

68. Additionally, a task force on the uses of PPPs for national and international policymaking will be established at the start of 2019. The Global ICP Unit has been undertaking the groundwork for the work of this task force by researching and identifying the various uses of PPPs and underlying ICP data, as shown in a subsequent section of the present report.

VI. Knowledge and advocacy

A. Advocacy surrounding the fiftieth anniversary of the International Comparison Programme

69. The fiftieth anniversary of ICP was celebrated in 2018,[14] and the community used this milestone to raise awareness of the Programme's role and its outputs. In this regard, events were held around the forty-ninth session of the Statistical Commission in March 2018 in New York, including a reception for Commission delegates and a video and poster exhibition.

70. This was followed in May 2018 by a celebratory event at the World Bank in Washington, D.C., at which Sir Angus Deaton, 2015 Nobel Prize laureate in economics and Chair of the ICP Technical Advisory Group, delivered the keynote speech emphasizing how PPPs were crucial to measuring economies and poverty in 1968 and remain the cornerstone of today's future-looking agenda for sustainable development. Kristalina Georgieva, Chief Executive Officer of the World Bank Group, Larry Summers, seventy-first Secretary of the United States Treasury, Robert M. Groves, Georgetown University Provost, and Alan Heston, ICP founding member,

among others, also spoke of the evolution and current relevance of ICP. The event was streamed live, allowing a global audience to follow the proceedings.

71. Outreach materials, such as an ICP video summarizing the history and importance of the Programme and a series of posters, were prepared and showcased. Also, many participating countries provided testimonials on the impact and relevance of the Programme.

B. Knowledge material

72. The PPP eLearning course on the fundamentals of PPPs[15] was officially released in March 2018. The course consists of 5 sections and 17 modules covering broad topics related to PPPs, including concepts, data requirements, methodology, calculations and uses. This interactive course serves a large audience, including policymakers, international organizations, researchers, students and the general public who wish to enhance their knowledge of PPPs. The course is delivered through the World Bank online open learning campus, a web-based destination for development learning. In the first six months since its launch, around 290 people have enrolled. The course was also used in regional and national workshops to train government officials.

73. In late 2018, the Global ICP Unit launched an ICP blog series under the World Bank's data blog portal, which invites authors to explore ideas and issues under the ICP umbrella, including innovations in data collection, compilation, curation and dissemination, discussions on methodology, as well the use of PPPs in the growing world of development data.

C. Outreach material

74. As a part of its continuous efforts to promote the use of PPPs, the Global ICP Unit launched a new ICP website in April 2017, as previously reported. Over the reporting period, materials were made available on the website both to promote all aspects of ICP and to maintain the transparency of the Programme. The website contains links to a repository of over 1,100 files that provide an overview of the Programme and its history, governance structure, results and their uses, methodology and research agenda. The website also makes available information and documentation of ICP governance meetings, ICP reports, manuals, videos, newsletters and links to media articles, academic and research papers and major publications using ICP data and results.

75. The Global ICP Unit has lately rebranded its quarterly newsletter as "ICP Highlights".[16] With a new user-friendly platform, the newsletter continues to provide information covering ICP governance, capacity-building and outreach activities, as well as information on the latest uses of ICP and PPP data.

D. International conferences and seminars

76. The Programme was showcased at the World Bank booth at the United Nations World Data Forum in October 2018 in the United Arab Emirates. It was also centre stage at two conferences held in late 2018 in China, one on the theme "Fifty years of the International Comparison Programme: achievements and moving forward", held

[15] See www.worldbank.org/en/programs/icp/brief/e-learning.

in October 2018, and one on the theme "Intracountry comparisons of poverty and living conditions: measuring well-being at the local level for public policy with a focus on China", held in December 2018.

77. The sixteenth meeting of the Ottawa Group will be held in May 2019 in Brazil, and PPPs will be on the agenda, with a special focus on the integration and consistency of ICP and CPIs. Additionally, a session on the theme "PPP-based comparisons across and within countries" will be organized within the International Association for Research in Income and Wealth special conference in September 2019 in the Russian Federation.

78. A comprehensive list of ICP-related conference and seminars is maintained on the ICP website.

VII. Use and applications of purchasing power parities

79. Both PPPs and underlying ICP data are utilized for a plethora of analyses at the global, regional and national levels and cover many themes under the economic, environmental and social development umbrellas. Cross-country and temporal studies employ PPPs for consistent, robust and meaningful data outputs, used not only by the development community and researchers, but by policymakers, the media and the wider public.

80. In order to gauge the frequency of data use, a recent review of how often "purchasing power parity/ies" appeared online over a month in 2018 was carried out using the Factiva research tool, which accesses 36,000 online sources. The term(s) appeared in over 500 references during the period and included around 115 articles by major media news outlets. India, China and the United States of America were mentioned most often, while around 80 other countries were also referenced. Reports by the international development community, for example the United Nations, the International Labour Organization (ILO), IMF, the International Energy Agency, the World Health Organization and the World Bank to name a few, and papers from other research bodies and academic outlets also contributed to this total. Factsheets and forecasts for individual countries made up about 150 of the monthly total.

81. Recent analyses have used PPPs to compare the volume of national economies using GDP in PPP terms. It is encouraging to see GDP in PPP terms used more widely and correctly for cross-country comparisons, instead of GDP in exchange rate terms, in many articles and journals. The Global ICP Unit has produced a variety of leaflets, videos and blogs explaining these different measures of the economy, which are widely distributed though World Bank channels and linked from the ICP website.

82. Use of GDP in PPP terms allows a measure of energy efficiency for Sustainable Development Goal target 7.3: energy intensity, the reciprocal of efficiency, is calculated as the amount of energy used to produce one dollar's worth (in PPPs) of goods and services and a recent analysis [17] illustrates how this differs between countries. Similarly, target 9.4 strives for clean and environmentally sound technologies and industrial processes and monitors carbon dioxide emissions per unit of GDP expressed in United States dollars constant 2010 PPP. The World Economic Forum's Global Competitiveness Index relies on GDP in PPP terms to establish both

[17] World Bank and others, "Energy efficiency", in *Tracking SDG 7: The Energy Progress Report*

domestic and foreign market size for the index's tenth pillar. Additionally, PPPs have been used to compare the economies of large cities[18] across the world.

83. In addition, GDP per capita in PPP terms is also used widely, often correlated against other indicators and variables such as monthly income, poverty headcount, social safety net spending,[19] prevalence of stunting,[20] educational enrolment and attainment,[21] productivity (as measured through night-time lights data),[22] waste generation,[23] a "positive peace" measure,[24] attitudes towards globalization,[25] foreign investment[26] and a country's tax burden,[27] for example. The World Bank's indicators of GDP per person employed and gross national income per capita, measured in PPP terms, are similarly used.

84. International poverty lines are expressed using PPPs and reflect the income necessary for, or cost of consuming, the minimum daily nutritional, clothing and shelter needs locally. The lowest of these, $1.90 a day (2011 PPPs) is based upon the national poverty lines of low-income countries, and those living below this line (the "poverty headcount") are considered to be the "extreme poor". Other international poverty lines are based on incomes and consumption levels in lower-middle ($3.20) and upper-middle ($5.50) income countries. These poverty lines, and their associated poverty headcounts, form the basis of much research. For example, ending extreme poverty is the first of the Sustainable Development Goal targets (1.1), and its monitoring over time uses the $1.90 poverty line. The impact of climate change on poverty rates[28] utilizes these PPP poverty lines in investigating potential loss of crops and environmental income across regions.

85. Various analyses convert other monetary values into PPP dollars to enable cross-border comparisons. For example, the value of unpaid care work, minimum wages, government spending on education,[29] the cost of violence and potential savings through reduced child mortality and better nutrition.[30] Notably, mean per capita consumption or income for both the poorest 40 per cent of society and the general population is measured using PPPs to monitor progress towards Sustainable Development Goal target 10.1, which promotes more equitable prosperity over time.

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[18] Julia Bird and others, *Toward Great Dhaka: A New Urban Development Paradigm Eastward* (Washington, D.C., World Bank, 2018).

[19] Katheleen Beegle, Aline Coudouel and Emma Monsalve, eds., *Realizing the Full Potential of Social Safety Nets in Africa* (Washington, D.C., World Bank, 2018).

[20] Sebastian Vollmer and others, "Association between economic growth and early childhood undernutrition: evidence from 121 demographic and health surveys from 36 low-income and middle-income countries", *The Lancet*, Global Health, vol. 2, No. 4 (April 2014).

[21] Eastern Caribbean Central Bank, "Report on the financial regulations for the foreign service of St. Kitts and Nevis", June 2018.

[22] Maria Marta Ferreyra and Mark Roberts, eds., *Raising the Bar for Productive Cities in Latin America and the Caribbean* (Washington, D.C., World Bank, 2018).

[23] Silpa Kaza and others, *What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050*, Urban Development Series (Washington, D.C., World Bank, 2018).

[24] Institute for Economics and Peace, *Global Peace Index 2018: Measuring Peace in a Complex World* (Sydney, 2018).

[25] See www.economist.com/graphic-detail/2016/11/18/what-the-world-thinks-about-globalisation.

[26] David Michael Gould, *Critical Connections: Promoting Economic Growth and Resilience in Europe and Central Asia* (Washington, D.C., World Bank, 2018).

[27] The Inefficiency of Inequality (United Nations publication, Sales No. E.18.II.G.11).

[28] Stephane Hallegatte and others, *Shock Waves: Managing the Impacts of Climate Change on Poverty*, Climate Change and Development Series (Washington, D.C., World Bank, 2016).

[29] World Bank, *World Development Report 2018: Learning to Realize Education's Promise* (Washington, D.C., World Bank, 2018).

86. The World Bank's twin goals of ending poverty and boosting shared prosperity mirror Goals 1 and 10 and thus also rely on PPPs to monitor progress.

87. As illustrated in the preceding text, the 2030 Agenda for Sustainable Development uses PPPs in official indicators within 5 of its 17 Goals. Other analyses make use of more PPP indicators to expand on these targets: the World Bank's Atlas of Sustainable Development Goals explores target 3.8, which seeks financial risk protection for people facing health expenses, by monitoring the people pushed below the poverty line by out-of-pocket health care expenditure. The joint ADB/ILO publication *Managing integration for better jobs and shared prosperity* explores the themes of Goal 8 (decent work and economic growth) by using GDP per employed person measured in PPPs to compare productivity throughout the region.

88. The World Bank's Sustainable Development Goals dashboard, as well as the United Nations Sustainable Development Goals Report, track progress over time with indicators using PPPs or analyse global and regional patterns of the resulting data. Similar compendiums focusing on regions include *Key Indicators for Asia and the Pacific, 2018* and the *2017 Africa Sustainable Development Report: Tracking Progress on Agenda 2063 and the Sustainable Development Goals*.

89. Other region-specific applications include an ADB[31] into how a shift of workers from agriculture to other sectors helps lift them above a minimum monthly wage for a family of four calculated using PPPs. The Eastern Caribbean Central Bank used PPPs in its recommendations[32] regarding allowances for foreign service officers in St. Kitts and Nevis. A number of the uses cited in the previous paragraphs refer to regional reports: ECLAC in the publication *The Inefficiency of Inequality* uses PPP dollars to estimate productivity (output per employee) and correlates the tax burden of countries against their GDP per capita measured using PPPs; the *Arab World Competitiveness Report 2018* uses PPPs for market size evaluation; *Critical Connections: Promoting Economic Growth and Resilience in Europe and Central Asia* examines how trade, investment, migration and other linkages among countries drive economic growth in the Europe and Central Asia region. In addition, PPPs are used in analysing foreign direct investment inflows, migration characteristics and travel patterns of citizens; and *North Africa Economic Outlook 2018* examines the macroeconomic performance of the region and the outlook for 2018 and 2019 and explores the relationship between food security and rural poverty. In addition, PPPs are used to establish the population living below various poverty lines, including a region specific one of $2.90 a day, and calculates the average per capita deficit per day.

VIII. Risks and mitigation measures

90. The completion of the 2017 cycle and the transformation of ICP into a permanent programme are susceptible to a number of risks, set out in the following paragraphs.

A. Country participation risks

91. A total of 175 countries are participating in the 2017 cycle, compared with 177 countries that fully participated in the 2011 round. By October 2018, data had been

[31] Arturo Martinez, Rhea Molato Gayares and Mia Kim Maceda Veloso, "It's not only manufacturing – trade services also take workers out of poverty", Asian Development Blog, 13 July 2018.

[32] "Report on the financial regulations for the foreign service of St. Kitts and Nevis"

received from 165 countries and efforts were under way to receive data from the remaining 10 countries.

92. Furthermore, the Caribbean islands suffered the aftermath of a deadly hurricane that delayed the initiation of their ICP surveys; however, 22 islands were effectively conducting their ICP activities in 2018. Argentina is also participating in the 2017 cycle after a long hiatus; the Islamic Republic of Iran, Georgia and Ukraine are conducting special exercises to link them to the global results through specific ICP regions.

93. Despite all efforts, a few countries in Africa, Asia and Western Asia faced unstable geopolitical situations that impeded their participation. Although these risks are very difficult to mitigate, global and regional implementing agencies are committed to building capacity in fragile and conflict States and they continuously encourage countries in those regions to participate in capacity-building activities, even if they are unable to conduct ICP surveys.

B. Timeliness risks

94. The delays in initiating the 2017 cycle survey activities in some regions and countries pose risks not only to the overall timeline, but also to the coverage and quality of the results. In October 2018, out of 175 participating countries, 10 countries were delayed in submitting household consumption price data and about 100 countries were still conducting their surveys and compilations for housing, government compensation and gross capital formation. Moreover, the limited capacity of some national implementing agencies to undertake ICP activities, and that of some regional implementing agencies to provide specialized technical assistance and produce regional ICP results, pose additional risks to the timely release of the 2017 cycle results by the end of 2019.

95. The Inter-Agency Coordination Group, at its meeting in March 2018, discussed these risks and agreed on the following mitigation measures, which were implemented in 2018: (a) the ICP Governing Board Co-Chairs issued letters to all national implementing agencies in May 2018 to urge them to complete the 2017 cycle activities in accordance with the agreed timetable to ensure a successful and timely implementation of the cycle; (b) regional implementing agencies multiplied their follow-up efforts with each country to check the status of their activities and any funding or technical assistance needs; (c) regional implementing agencies ensured that regional workshops were carried out in a timely manner; (d) the Global ICP Unit deployed specialized technical assistance to regional and national agencies to help with the implementation of ICP activities; and (e) regional implementing agencies submitted all available data from the 2017 cycle by the end of July 2018, which allowed the Unit to initiate the global validation process.

C. Quality, comparability and openness risks

96. The quality of ICP results can be affected by various factors, including quality issues of input data, as well as data processing or calculation errors. As a mitigation measure, dedicated task forces were established under the Technical Advisory Group to compute results and assess their quality prior to publication. In addition, a task team on data quality assurance for the PPP time series was established to assess the data availability and quality for the PPP time series and related metadata.

97. The first assessment of the ICP 2017 cycle input data revealed more robust data at an early stage than in previous ICP rounds. In addition, innovative validation

approaches that leverage data visualization were developed to increase the efficiency of ICP quality assurance processes. However, efforts to ensure intraregional and interregional data quality required more validation and technical assistance in various regions.

98. Poor comparability of ICP results over time may limit their usability and hence poses risks to the Programme. Some comparability risks can be mitigated within the Programme. For example, the decision to introduce no major methodological changes in the 2017 cycle improves comparability of ICP results over time. However, some factors that detract from ideal comparability are outside of the Programme's control. For example, there are clear challenges in comparing results over time as countries migrate from some regions to OECD. An assessment of the consistency between the results of ICP 2011 and ICP 2017 will take place as preliminary ICP 2017 results become available.

99. Regarding data access and openness, restricting the openness of ICP data would hinder the value of the Programme in the long run. To mitigate this risk, discussions are ongoing within the Inter-Agency Coordination Group to extend the publication level of ICP results so as to cover more detailed headings and to examine the possibility of providing users with access to more detailed data, while respecting confidentiality constraints and data quality limitations

D. Financial and sustainability risks

100. The 2017 cycle faced challenges with the timely channelling of funds between donors, implementing agencies and countries because of increased layers of administrative processes or the ineligibility of some countries to receive funds. Administrative obstacles are being mitigated through increased efforts to cut through red tape.

101. To ensure the sustainability of ICP as a permanent Programme, it is imperative to incorporate it as part of regular work programmes at the national, regional and global levels. A dedicated task force under the Technical Advisory Group will develop an advocacy document on the uses of ICP and PPP data for policymaking to aid chief statisticians make a stronger case for integrating ICP into the regular work programme of their agencies and secure the required permanent national resources for this work. Regional implementing agencies are also urged to incorporate ICP into their regular economic statistics work programmes.

IX. Conclusion

102. The implementation of the ICP 2017 cycle is under way in all regions and various governance, capacity-building and research activities have been conducted. However, challenges and risks still lie ahead. Data collection and submission delays in some regions and countries pose risks to the timeliness, coverage and quality of the Programme's results.

103. Nevertheless, certain challenges also bring opportunities. At its forty-eighth session, the Statistical Commission urged participating countries to integrate the Programme's activities into their regular work programmes and budgets. Having policymakers understand how the Programme's data can be used for national policymaking will make this goal easier to achieve. In this regard, various knowledge and advocacy activities outlined in the present report, as well as several ICP research agenda topics, address the importance of PPPs and their related measures to policymaking.

104. Looking beyond the ICP 2017 cycle, preparations for the ICP 2020 cycle need to begin in 2019. This includes ensuring that the necessary funding and administrative arrangements are in place to allow for data collection to take place effectively and without delay.

105. The global, regional and national implementing agencies remain dedicated to mitigating all risks to help achieve the immediate goal of a successful 2017 cycle, as well as the long-term goal of a sustained and permanent ICP.

106. **The Commission is requested:**

(a) **To take note of the progress made in implementing the 2017 cycle and outstanding risks;**

(b) **To urge national, regional and global agencies to complete the 2017 cycle activities without further delays, to ensure the timeliness of the 2017 results;**

(c) **To advise ICP stakeholders to initiate preparations for the 2020 cycle;**

(d) **To impress upon national, regional and global agencies the need to incorporate ICP into their regular statistical work programmes, so as to ensure its sustainability as a permanent programme.**